Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
Recommendations of the Independent Panel	)	
Reviewing the Impact of Hurricane Katrina on	)	EB Docket No. 06-119
Communications Networks	)	

Comments of the Enhanced 911 program of
The State of Washington

The Independent Panel in reviewing the impact of hurricane Katrina did an excellent service by objectively documenting the difficulties encountered in restoration of telecommunications services. However, their greater contribution may be in the recommendations for actions that would preclude the necessity for restoration, or would make restoration a matter of healing, not restoring life, to the networks. The comments submitted below are in the context of the emergency reporting and dispatching networks that serve the public to report a need for assistance and dispatch that assistance. In an event of the magnitude of Katrina those networks will be disrupted and restoration may be the priority. However, in daily disasters of a lesser magnitude the lessons of Katrina when applied will assure continued service for these essential public safety services.

The following comments are numbered to correspond with the paragraph numbers of the request.

8. Pre-positioning and improved recovery coordination to a large degree are co-reliant. Both involve knowing what capacities are available and planning actions to mitigate for the loss of capacity. The concept of proactive measures to assure network reliability is an inherent obligation of those who provide telecommunications services. However many of the actions that lead to disaster resistant network attributes such as physical diversity and equipment redundancy require expenditures that may not be justified in a competitive marketplace. This is particularly true as technological advances increase the capacity of infrastructure elements permitting fewer costly investments to service a relatively stable customer base. The result is that it is unlikely that any one telecommunications provider will be able to provide the degree of disaster resistance desirable. Exercises and checklists would serve to confirm this for each provider and those should be common practice. A type of appropriate checklist already exists in the existing NRIC best practices. However, it is essential that there be a mechanism developed that permits providers to actively plan, exercise and invoke common assistance in disasters, large or small, without concern over violation of Commission rules intended to promote competition and carrier line-of-business separations.

11. Credentialing is a major effort in any disaster of size and a clear facilitation tool if done in a coordinated manner to assure that the necessary capabilities are effective and that those who provide the support can themselves be supported by the response systems. Credentialling systems must be inclusive, well understood and rapidly deployable. The will by necessity be multi-layered to accommodate the varied nature of access control and response needs. The Commission should work with others in the design of these systems to assure that all communication workers are included, but also

that any proposed communications systems that support the credentialing and on scene access controls have adequate capacity while being rapidly deployable.

12, 13. Enormous capabilities and capacity exists in the networks today due in part to competition. The recommendation that the industry develop business continuity plans, train on disaster recovery and exercise capabilities has at its heart the need for carriers who would in normal times be staunch competitors become collaborators. Before any of the planning, training and exercising can be truly preparatory the Commission will need to implement a mechanism that encourages appropriate collaboration.

As suggested by the Panel a restoration collaboration mechanism could be industry sponsored, but only if all appropriate carriers were involved would it be effective. This implies that it in some manner participation would be required to assure that all resources are available. It is suggested that State Regulators be invited and involved in this process to provide a local ability to provide rapid response for coordination assistance in smaller disasters and to assure that plan and exercise development are related to the most likely scenarios in the region.

14. With respect to the use of existing restoration plans it should be noted that the Enhanced 911 systems of today have been integrated into the operations of the network to the degree that restoration of those services should be considered as part of the restoration of plant which must be done before the TSP process is invoked. If not considered at this higher level these essential services will in the existing hierarchy not be addressed until after federal circuits have been restored.

16. Improving the operability and interoperability of public safety and 911 communications in times of crisis may only to a small degree be effectively forwarded by the Commission. Public safety radio systems in particular are funded locally, seldom on even a statewide basis. There may be a significant potential for the development of commercial/public partnerships to forward both deployments which could be encouraged by the FCC, but for public safety the issue for deployment of radio systems is likely to be funding.

The Panel recommendations on the deployment of more robust 911 infrastructure were in direct alignment with NRIC best practices and have been proven to add resiliency to the 911 network. They also simplify that network by moving from a many stand alone switching configuration to a tandem configuration with the paired units separated. The separation increases the opportunities for diversity while increasing the redundancy. However, implementation will be difficult until carries clearly understand that artificial boundaries such as rate centers and LATAs do not apply when designing 911 systems.

One of the other constraints to deployment of robust 911 systems may be the ongoing belief that 911 traffic cannot be carried on the robust self healing networks in place for other critical applications or that SS7 signaling cannot be used for 911 network control. The Commission should encourage carriers who provide 911 call management to report in detail how they are implementing the NRIC best practices related to 911 and what steps the carrier is taking to move those networks to a robust diverse route structure. In addition the Commission should investigate how collaboration with rural carriers and others providing communications services in rural areas could improve the opportunities for diversity for 911.

Future NRICs should be charged with developing a parallel set of best practices for the public safety community aimed at strengthening the communications networks, including both radio and 911, for localized emergencies as well as major events. In so doing it must be recognized that there is synergy between these services with each being a potential facilitation tool for restoration of the other even for small localized events.

17. The suggestion that it is appropriate to designate a backup Public Safety Answering Point at a minimum of 200 miles away is problematic. There is no arbitrary distance that will be effective in assuring continuous 911 operations. Providing distance backup is easy from the telephone network view, but is much more problematic from the operational view of providing continuous dispatch capabilities with familiar protocols and adequate records controls. The concept that PSAP are backed up by other PSAPs some distance away has been implemented in locations in the State of Washington and is effective. It is also the concept planned for future implementation. However, it needs to be done on the basis of capabilities of the backup PSAP, the vulnerability of each to common threats, and the technical capabilities of each. In such a plan one must also plan for personnel from the out of service PSAP to travel to the other center as well as data transfer between the PSAPs systems such as Computer Aided Dispatch. Effective cross training and protocol coordination must occur as well as regular exercising of the backup plan. The suggestion of 200 miles simplifies the direction intended when what should be implemented is a backup plan for every PSAP that to the degree possible permits that facility to be abandoned with no loss of capability.

A long distance backup plan should be developed first with consideration for the vulnerabilities to assure that one major event will not disable the backup also. Operationally it should provide capability to assume all functions of the site being abandoned. For radio systems this is a challenge since the PSAP is frequently the single primary control point or focal point for the local public safety radio systems. Systems such as records and Computer Aided Dispatch are easier since a backup plan would have the file storage for those systems mirrored at the backup on a real-time basis but that requirement demonstrates the value of having PSAPs who operate similar systems.

Appropriate backup for PSAPs is a complex issue and deserves considerable attention. Because of the criticality of the PSAP in managing both citizen reporting of events and the management of resources maintaining their functionality is a mandate. That backup can be accomplished more effectively than ever with the tools now available for network management. Getting there is huge project that must be driven by considerations for all aspects of the vulnerabilities as well as the capabilities of the partners who will implement and operate the backup capability. It should also not be forgotten that the backup many by necessity require load sharing to smaller PSAPs when a major facility is involved. And it is likely that the plan will involve transport facilities that cross LATA or state boundaries and even between PSAPs with different 911 service providers. On the positive side an appropriate backup plan will also provide daily operational benefits such as real-time off site file storage and the ability to close operations to perform maintenance work that would otherwise require running duplicate systems or complex coordination.

Submitted by the Washington State Enhanced 911 Program

Robert G. Oenning, Administrator
Camp Murray, Washington 98430-5011

Voice 253-512-7011
Fax 253-512-7202
Email b.oenning@emd.wa.gov